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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/004,988	**Applicant(s)** CULP ET AL.
	Examiner Kuen S. Lu	**Art Unit** 2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *46-90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *46-90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is responsive to Applicant's Amendment filed April 20, 2007. Applicant's amendment canceled claims 1-45 and added claims 46-90 is acknowledged.

2. As to Applicant's Arguments or Remarks Made in the Amendment has been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3.1. Claims 46-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amaratunga et al. (U.S. Publication 2003/0061091, hereafter "Amaratunga") and in view of Ehlers et al. (U.S. Patent 6,216,956, hereafter "Ehlers") and IEEE Std 1249-1996: IEEE Guide for Computer-Based Control for Hydroelectric Power Plant Automation, 10, December 1996, The Institute of Electrical and Electronics Engineers, Inc. (hereafter "IeeeStd").

As per claim 46, Amaratunga teaches “A system for remote monitoring and controlling of energy consumption of a facility, comprising” (See Abstract where an energy consumption system measures, monitors and recommends action on energy consumption system at remote site):

“a processor” (See Fig. 1, element 20 and Page 4, [0030], lines 16-20 where the processing module of the energy consumption prediction system comprises a processor);

“a memory coupled to the processor” (See Fig. 1 and [0028] where data processing module analyzes energy consumption data received at data control unit, inherently a memory storage unit);

“a database coupled to the processor” (See Page 7, [0048], lines 1-4 where a historical database is the database to collect and store data from meters, devices and sensors at the energy consumption systems or consumption site).

Amaratunga does not explicitly teach that the database operable to “receive and store one or more reduced storage intensive values from the facility when a predetermined event has not occurred, the one or more reduced storage intensive values representing energy consumption information for a period of time”.

However, IeeeStd teaches the database operable to “receive and store one or more reduced storage intensive values from the facility when a predetermined event has not occurred, the one or more reduced storage intensive values representing energy consumption information for a period of time” (See Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in

which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine IeeeStd's teaching with Amaratunga reference by varying data collection rate at Amaratunga's system because both references are directed to collecting and analyzing data collected from energy related systems where IeeeStd focuses on energy generation while Amaratunga predicts energy consumption, and the combined teaching of the references would have enabled Amaratunga system to more frequently collect data during rapid change period for better analyzing and grasping a trend of change that would have been utilized to more accurately predict future energy consumption.

The combined teaching of the IeeeStd and Amaratunga references further teaches the following:

the database further operable to "receive and store event analysis information from the facility when a predetermined event has occurred, the event analysis information including energy consumption information before the predetermined event and energy consumption information collected after the predetermined event" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that

changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review);

"an analysis engine residing in the memory and executable by the processor, the analysis engine operable to evaluate the one or more reduced storage intensive values and the event analysis information" (See Amaratunga: Page 4, [0029], lines 1-4 where a TEUP (Total Energy Use Profile) is developed for analyzing and evaluating the energy amounts and providing other energy use information, and IeeeStd: Page 14, Para. 4.3.1 where all data points during the event duration are stored for analysis), and

"determine whether energy consumption operating parameters require modification to increase efficiency" (See Amaratunga: Page 5, [0037], lines 13-20 where amount of energy to produce pollution is utilized to predict if energy consumption system is operating efficiently and at Page 7, [0047], lines 24-28 where a feedback control capability is built for attempting to bring the energy consumption system to a more efficient operating state); and

"a control engine residing in the memory and executable by the processor, the control engine operable to initiate operating parameter modification of an energy consumption system of the facility in response to a desired operating parameter modification" (See Amaratunga: Figs. 1-2, Table 1, Page 9, Para. 4.2.2.4, Page 12, Para. 4.2.3.4 and Page 14, Para. 4.3.1 where computer-based controls are located locally, centrally or remotely with control functions executed by computer operable to perform automatic control

functions and to direct optimal loading of units, and initiate change of parameter variable value range when the value reaches out of range: Figs. 1-2, Table 1, Page 9, Para. 4.2.2.4, Page 12, Para. 4.2.3.4 and Page 14, Para. 4.3.1 where computer-based controls are located locally, centrally or remotely with control functions executed by computer operable to perform automatic control functions and to direct optimal loading of units, and initiate change of parameter variable value range when the value reaches out of range).

As per claim 59, Amaratunga teaches “A method for remote monitoring and controlling of energy consumption of a facility, comprising” (See Abstract where an energy consumption system measures, monitors and recommends action on energy consumption system at remote site).

Amaratunga does not explicitly teach “receiving one or more reduced storage intensive values from a facility when a predetermined event has not occurred, the one or more reduced storage intensive values representing energy consumption information for a period of time”.

However, IeeeStd teaches “receiving one or more reduced storage intensive values from a facility when a predetermined event has not occurred, the one or more reduced storage intensive values representing energy consumption information for a period of time” (See Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is

overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine IeeeStd's teaching with Amaratunga reference by varying data collection rate at Amaratunga's system because both references are directed to collecting and analyzing data collected from energy related systems where IeeeStd focuses on energy generation while Amaratunga predicts energy consumption, and the combined teaching of the references would have enabled Amaratunga system to more frequently collect data during rapid change period for better analyzing and grasping a trend of change that would have been utilized to more accurately predict future energy consumption.

The combined teaching of the IeeeStd and Amaratunga references further teaches the following:

"receiving event analysis information from the facility when a predetermined event has occurred, the event analysis information including energy consumption information before the predetermined event and energy consumption information collected after the predetermined event" (See Amaratunga: Page 4, [0029], lines 1-4 where a TEUP (Total Energy Use Profile) is developed for analyzing and evaluating the energy amounts and providing other energy use information, and IeeeStd: Page 14, Para. 4.3.1 where all data points during the event duration are stored);

"evaluating the one or more reduced storage intensive values and the event analysis

information to determine whether energy consumption operating parameters require modification to increase efficiency" (See Amaratunga: Page 5, [0037], lines 13-20 where amount of energy to produce pollution is utilized to predict if energy consumption system is operating efficiently and at Page 7, [0047], lines 24-28 where a feedback control capability is built for attempting to bring the energy consumption system to a more efficient operating state);

"initiating operating parameter modification of an energy consumption system of the facility in response to a desired operating parameter modification" (See IeeeStd: Figs. 1-2, Table 1, Page 9, Para. 4.2.2.4, Page 12, Para. 4.2.3.4 and Page 14, Para. 4.3.1 where computer-based controls are located locally, centrally or remotely with control functions executed by computer operable to perform automatic control functions and to direct optimal loading of units, and initiate change of parameter variable value range when the value reaches out of range).

As per claims 72 and 81, Amaratunga teaches a method and a system for remote monitoring and controlling of energy consumption of a facility, comprising" (See Abstract where an energy consumption system measures, monitors and recommends action on energy consumption system at remote site):

"collecting, at a facility, energy consumption information" (See [0017] where an energy-consumption predicting system collects data on energy delivered and uses by an energy consumption site).

Amaratunga does not explicitly teach "determining, based on the collected energy

consumption information, whether a predetermined event has occurred", although Amaratunga teaches collecting energy consumption data as described in Abstract.

However, IeeeStd teaches "determining, based on the collected energy consumption information, whether a predetermined event has occurred" (See Page 14, Para. 4.3.1 where an event is initiated and the event triggers data collection rate change).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine IeeeStd's teaching with Amaratunga reference by varying data collection rate at Amaratunga's system because both references are directed to collecting and analyzing data collected from energy related systems where IeeeStd focuses on energy generation while Amaratunga predicts energy consumption, and the combined teaching of the references would have enabled Amaratunga system to more frequently collect data during rapid change period for better analyzing and grasping a trend of change that would have been utilized to more accurately predict future energy consumption.

The combined teaching of the IeeeStd and Amaratunga references further teaches the following:

"if a predetermined event has not occurred, processing the energy consumption information to one or more reduced storage intensive values representing energy consumption information for a period of time and transmitting the one or more reduced storage intensive values" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual

event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review);

"if a predetermined event has occurred, preserving event analysis information that includes at least a portion of the energy consumption information collected before the predetermined event and energy consumption information collected after the predetermined event, and transmitting the event analysis information" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

As per claim 90, Amaratunga teaches "A system for remote monitoring and controlling of energy consumption of a facility" (See Fig. 1, [0017] and [0028] where data processing module analyzes energy consumption data received at data control unit, inherently a memory storage unit), comprising:

"remote monitoring equipment operable to: collect energy consumption information" (See Fig. 1, [0017] and [0028] where data processing module analyzes energy consumption data received at data control unit, inherently a memory storage unit).

Amaratunga does not explicitly teach "determine, based on the collected energy consumption information, whether a predetermined event has occurred", although Amaratunga teaches collecting energy consumption data as described in Abstract.

However, IeeeStd teaches "determine, based on the collected energy consumption information, whether a predetermined event has occurred" (See Page 14, Para. 4.3.1 where an event is initiated and the event triggers data collection rate change).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine IeeeStd's teaching with Amaratunga reference by varying data collection rate at Amaratunga's system because both references are directed to collecting and analyzing data collected from energy related systems where IeeeStd focuses on energy generation while Amaratunga predicts energy consumption, and the combined teaching of the references would have enabled Amaratunga system to more frequently collect data during rapid change period for better analyzing and grasping a trend of change that would have been utilized to more accurately predict future energy consumption.

The combined teaching of the IeeeStd and Amaratunga references further teaches the following:

"if a predetermined event has not occurred, process the energy consumption information to one or more reduced storage intensive values representing energy consumption information for a period of time and transmitting the one or more reduced storage intensive values" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is

monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review);

"if a predetermined event has not occurred, preserve event analysis information that includes at least a portion of the energy consumption information collected before the predetermined event and energy consumption information collected after the predetermined event, and transmitting the event analysis information" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review);

"a processor" (See Amaratunga: Fig. 1, element 20 and Page 4, [0030], lines 16-20 where the processing module of the energy consumption prediction system comprises a processor);

"a memory coupled to the processor" (See Amaratunga: Fig. 1 and [0028] where data processing module analyzes energy consumption data received at data control unit, inherently a memory storage unit);

"a database coupled to the processor, the database operable to" (See Amaratunga: Page 7, [0048], lines 1-4 where a historical database is the database to collect and

store data from meters, devices and sensors at the energy consumption systems or consumption site):

"receive and store the one or more reduced storage intensive values from the facility, and receive and store event analysis information" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review);

"an analysis engine residing in the memory and executable by the processor, the analysis engine operable to" (See Amaratunga: Page 4, [0029], lines 1-4 where a TEUP (Total Energy Use Profile) is developed for analyzing and evaluating the energy amounts and providing other energy use information, and IeeeStd: Page 14, Para. 4.3.1 where all data points during the event duration are stored for analysis):

"evaluate the one or more reduced storage intensive values and the event analysis information, and determine whether energy consumption operating parameters require modification to increase efficiency" (See Amaratunga: Page 5, [0037], lines 13-20 where amount of energy to produce pollution is utilized to predict if energy consumption system is operating efficiently and at Page 7, [0047], lines 24-28 where a feedback control capability is built for attempting to bring the energy consumption system to a more efficient operating state);

"a control engine residing in the memory and executable by the processor, the control engine operable to initiate operating parameter modification of an energy consumption system of the facility in response to a desired operating parameter modification" (See Amaratunga: Figs. 1-2, Table 1, Page 9, Para. 4.2.2.4, Page 12, Para. 4.2.3.4 and Page 14, Para. 4.3.1 where computer-based controls are located locally, centrally or remotely with control functions executed by computer operable to perform automatic control functions and to direct optimal loading of units, and initiate change of parameter variable value range when the value reaches out of range: Figs. 1-2, Table 1, Page 9, Para. 4.2.2.4, Page 12, Para. 4.2.3.4 and Page 14, Para. 4.3.1 where computer-based controls are located locally, centrally or remotely with control functions executed by computer operable to perform automatic control functions and to direct optimal loading of units, and initiate change of parameter variable value range when the value reaches out of range).

As per claims 47 and 60, the combined teaching of the IeeeStd and Amaratunga references further teaches "at least one of the one or more reduced storage intensive values is an average value for one or more parameters of the energy consumption information for the period of time" (See Amaratunga: col. 5, lines 11-14 by using historical data of energy consumption to compute energy consumption of, at least one, and IeeeStd: Page 14, Paragraph 4.3.1, where data is colleted based on parameter at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs,

older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

As per claims 48 and 61, the combined teaching of the IeeeStd and Amaratunga references further teaches “the event analysis information includes, for a defined period of time, all of the energy consumption information collected by a data collector at the facility before the predetermined event and all of the energy consumption information collected by the data collector at the facility after the predetermined event” (See Amaratunga: col. 5, lines 11-14 by using historical data of energy consumption to compute energy consumption of, at least one, and IeeeStd: Page 14, Paragraph 4.3.1, where data is colleted based on parameter at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

As per claims 49 and 62, Amaratunga further teaches “the database receives the one or more reduced storage intensive values and the event analysis information via an Internet communications network” (See Fig. 1, elements, 20 and 31s, and Page 4, [0027], lines 25-26 where the communication link, including internet, connects to the

processing and at Page 7, [0048], lines 1-4 where the database is built up by the processing module).

As per claims 50 and 63, Amaratunga teaches "the database receives the one or more reduced storage intensive values and the event analysis information from a data collector disposed at the facility" (See Fig. 1, elements 29 and 100, and Page 4, [0027] where data collection unit is located inside of the energy consumption site).

As per claims 51 and 64, the combined teaching of the IeeeStd and Amaratunga references further teaches "the database further receives and stores environmental data, and wherein the analysis engine is further operable to determine whether operating parameter modification is required using the environmental data" (See Amaratunga: Page 7, [0047] where identifying the likely cause for the variance in energy consumption and comparing variables with data from the historical database, IeeeStd: Page 16, Para. 4.8 where weather data is utilized for forecasting of energy activities).

As per claims 52 and 65, the combined teaching of the IeeeStd and Amaratunga references further teaches "the environmental data comprises environmental forecast information, and wherein the analysis engine is operable to determine whether operating parameter modification is required for the energy consumption system using the environmental forecast information" (See Page 6, [0042], Page 7, [0047], lines 24-28 and [0049] where the energy consumption prediction system utilizes factors such as

forecasting energy use, nature of the energy, energy-provider controlling factors, energy consumption site particulars, details of energy consumption system, and manufacturing or operating process variables, and a feedback control capability is built for attempting to bring the energy consumption system to a more efficient operating state, IeeeStd: Page 16, Para. 4.8 where weather data is utilized for forecasting of energy activities).

As per claims 53 and 66, the combined teaching of the IeeeStd and Amaratunga references further teaches "comprising a validation engine residing in the memory and executable by the processor, the validation engine operable to validate the one or more reduced storage intensive values and the event analysis information" (See Amaratunga: Page 4, [0030] and Page 5, [0037], lines 8-20 by collecting, evaluating and analyzing data and determining if the energy consumption system is operating efficiently and energy consumption amount is consistent with what benchmarked, and IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

As per claims 54 and 67, the combined teaching of the IeeeStd and Amaratunga references further teaches "the validation engine is operable to validate the one or more

reduced storage intensive values and the event analysis information using environmental data" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review and further at Page 16, Para. 4.8 where weather data is utilized for forecasting of energy activities, and Amaratunga: Page 7, [0047] where identifying the likely cause for the variance in energy consumption and comparing variables with data from the historical database).

As per claims 55 and 68, the combined teaching of the IeeeStd and Amaratunga references further teaches "the validation engine is operable to validate the one or more reduced storage intensive values and the event analysis information using historical energy consumption data associated with the facility" (See Amaratunga: Page 6, [0042] where the energy consumption prediction system identifies the likely cause of energy consumption variance by utilizing factors such as nature of the energy, energy-provider controlling factors, energy consumption site particulars, details of energy consumption system, and manufacturing or operating process variables, and IeeeStd: IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten

by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review).

As per claims 56 and 69, the combined teaching of the IeeeStd and Amaratunga references further teaches "the one or more reduced storage intensive values and the event analysis information are collected by a plurality of data collectors disposed at the facility" (See IeeeStd: IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place. Upon initiation of an event, the data collection rate will be increased to provide extremely fine tune resolution and all data points stored for future review, and Amaratunga: Fig. 1, element 20 and Page 4, [0030], lines 16-20 where meter-generated information is collected and transmitted to data processing module over communication link).

As per claims 57 and 70, the combined teaching of the IeeeStd and Amaratunga references further teaches "the plurality of data collectors are coupled together, and the energy consumption information collected by a first data collector is transmitted to a second data collector" (See IeeeStd: Page 14, Para. 4.3 where data is collected from device and transmitted to intermediate data collection system, and further transmitted to destination for collection and analysis).

As per claims 58 and 71, the combined teaching of the IeeeStd and Amaratunga references further teaches "the second data collector transmits both the energy consumption information collected by the first data collector and the energy consumption information collected by the second data collector" (See IeeeStd: Page 14, Para. 4.3 where plant computer can enhance to acquire data from equipment and system at the facility in which system at the facility transmits both the energy consumption information collected by the first data collector and the energy consumption information collected by the second data collector).

As per claims 73 and 82, the combined teaching of the IeeeStd and Amaratunga references further teaches "processing the energy consumption information to one or more reduced storage intensive values involves yielding one or more values that represents the energy consumption information and discarding the energy consumption information for the period of time" (See IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place).

As per claims 74 and 82, Amaratunga teaches "at least one of the one or more values is an average value" (See Amaratunga: col. 5, lines 11-14 by using historical

data of energy consumption to compute energy consumption suggests average value is used).

As per claims 75 and 82, the combined teaching of the IeeeStd and Amaratunga references further teaches "The method of Claim 72, wherein the event analysis information includes, for a defined period of time, all of the energy consumption information collected by a data collector at the facility before the predetermined event and all of the energy consumption information collected by the data collector at the facility after the predetermined event" (See IeeeStd: IeeeStd: Page 14, Paragraph 4.3.1, item c where data is colleted at variable interval monitoring triggered by event occurrence in which data is monitored and stored at a rate that changes as the result of an event. If no unusual event occurs, older data is overwritten by new data and constant interval storage takes place).

As per claims 76 and 82, Amaratunga teaches "the one or more reduced storage intensive values and the event analysis information is transmitted via an Internet communications network" (See Fig. 1, elements, 20 and 31s, and Page 4, [0027], lines 25-26 where the communication link, including internet, connects to the processing and at Page 7, [0048], lines 1-4 where the database is built up by the processing module).

As per claims 77 and 82, Amaratunga teaches "receiving an operating parameter modification of an energy consumption system at the facility" (See Page 7, [0047], lines

24-28 where a feedback control capability is built for attempting to bring the energy consumption system to a more efficient operating state).

As per claims 78 and 82, Amaratunga teaches "the collecting is carried out by a plurality of data collectors disposed at the facility" (See Fig. 1, elements 29 and 100, and Page 4, [0027] where data collection unit is located inside of the energy consumption site).

As per claims 79 and 82, the combined teaching of the IeeeStd and Amaratunga references further teaches the following:

"transmitting the energy consumption information collected by a first data collector at the facility to a second data collector at the facility" (See IeeeStd: Page 14, Para. 4.3 where plant computer can enhance to acquire data from equipment and system at the facility in which system at the facility transmits both the energy consumption information collected by the first data collector and the energy consumption information collected by the second data collector);

"transmitting, from the second data collector to a remote location, the energy consumption information collected by the first data collector and the second data collector" (See IeeeStd: Page 14, Para. 4.3 where plant computer can enhance to acquire data from equipment and system at the facility in which system at the facility transmits both the energy consumption information collected by the first data collector and the energy consumption information collected by the second data collector).

As per claims 80 and 89, Amaratunga teaches "the one or more reduced storage intensive values and the event analysis information is transmitted to a location remote from the facility" (See IeeeStd: Page 14, Para. 4.3 where plant computer can enhance to acquire data from equipment and system at the facility in which system at the facility transmits both the energy consumption information collected by the first data collector and the energy consumption information collected by the second data collector).

References

4.1. The prior art made of record

A. U.S. Publication 2003/0061091

V. IEEE Std 1249-1996: IEEE Guide for Computer-Based Control for Hydroelectric Power Plant Automation, 10, December 1996, The Institute of Electrical and Electronics Engineers, Inc.

4.2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

B. U.S. Patent 6,216,956

D. U.S. Patent 6,056,691

C. U.S. Patent 5,651,264

E. U.S. Patent 4,319,327

U. Data Mining to Improve Energy Efficiency in Buildings, September 2001 (web site of knowledgeprocesssoftware.com/newweb/CounterDet).

Conclusion

5. Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1 .136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-39000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 703-305-3900 (toll-free).

Kuen S. Lu
Patent Examiner, Art Unit 2167
June 13, 2007